

Summary of the Invention

Space part S within a detecting chip 2 for single base substitution SNP and point mutation of genes where a plurality of gold electrodes 8 are formed in the base 7 of closed space part S, oligonucleotides 10 with different gene sequences are fixed to the gold electrodes 8, a common electrode 16 arranged not to contact the gold electrodes 8, are filled with DNA samples, voltage is applied between the common electrode 16 and the gold electrode 8, and current is measured to allow the double-stranded DNA to be detected and analyzed. It becomes possible to detect and analyze a large number of single base substitution SNP and point mutation for a plurality of DNA samples.